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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,060	02/03/2004	Steven Rehkemper	4004013.0095	4534

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CHICAGO, IL 60606-1615

EXAMINER

THANH, QUANG D

ART UNIT


PAPER NUMBER

3771

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s) 	
	10/772,060	REHKEMPER ET AL.	
	Examiner	Art Unit	
	Quang D. Thanh	3771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2007 and 30 March 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/22/07 has been entered.
2. This office action is responsive to the amendment filed on 2/22/07. As directed by the amendment, claims 1 and 4 have been amended; claims 2, 5 and 7-27 have been cancelled nor added. Thus, claims 1, 3-4 and 6 are presently pending in this application.

### ***Response to Amendment***

3. The amendment filed 2/22/07 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "expelled pressurized liquid flows over said piece of flossing material **in a direction substantially perpendicular** to the flossing material" in claims 1 and 4.

Applicant is required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to provide an adequate written description of the invention for the “expelled pressurized liquid flows over said piece of flossing material *in a direction substantially perpendicular* to the flossing material” (claims 1 and 4)

Claims 1 and 4 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not adequately described as set forth in the above objection to the specification

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sale et al. (6,164,967) in view of Diffendal (5,906,213). Sale et al. discloses an oral cleaning device comprising: a reservoir body 21 having a lower aperture and an upper aperture 28 (fig. 5b); a manual (fig. 7) operable removable (fig. 2) pump 19 attached to the

reservoir body in communication with the lower aperture (fig. 7), the manual operation of the removable pump permit a user to increase pressure within reservoir body such that the liquid becomes pressurized ; a neck and head assembly 4 (fig. 5a) having an outlet aperture 71 centrally positioned in the neck and head assembly (fig. 4a), the outlet aperture for expelling pressurized liquid (fig. 5b); a mechanism 88 in communication with the neck and head assembly and the reservoir body for controlling the flow of pressurized liquid out of the device (fig. 7); except for a flossing head assembly secured to the neck/head assembly that includes a pair of arms extending in an arc from a center region creating a cavity therebetween and a piece of flossing material that is supported by the pair of arms over said cavity and substantially perpendicularly over the centrally positioned outlet aperture such that expelled pressurized liquid flows over said piece of flossing material in a direction substantially perpendicular to the flossing material. However, Diffendal teaches a dental cleaning device (fig. 1) having a means for dispensing pressurized fluid out of an aperture 69, and a flossing head assembly that includes a pair of arms extending in an arc from a center region creating a cavity therebetween (fig. 1) and a piece of flossing material 5 that is supported by the pair of arms over said cavity and substantially perpendicularly over the centrally positioned outlet aperture 69 such that expelled pressurized liquid flows over said piece of flossing material in a direction substantially perpendicular to the flossing material (best seen in fig. 1, expelled pressurized liquid flows over said piece of flossing material in a direction substantially perpendicular to the width of the flossing material). Therefore, it would have been obvious to one of ordinary skill in the art at the

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time of invention was made to modify the device in the Sale's reference, to include a flossing head assembly having all the features as taught by Diffendal, for the purpose of allowing the user to spray the fluid such as mouth wash down the length of the dental floss 5 while cleaning his teeth (col. 3, lines 1-7).

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sale/Diffendal in view of Dougan et al. (7,059,334). Sale/Diffendal discloses the claimed invention except for a grooved region sized to removably support the center region. However, Dougan et al. discloses a flossing head assembly (fig. 1) comprising: a center region 23 (fig. 3a) having a pair of arms 21 (fig. 3a) extending therefrom to create a cavity region between said pair of arms, the pair of arms 21 supporting a piece of flossing material 5 over said cavity; and a grooved region 10 sized to removably support the center region 23 (fig. 3a). Therefore, at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the flossing head assembly so that it would include a pair of arms and a groove region as taught by Dougan, for the purpose of allowing the flossing head to be removed and thus replaced with new one, and because applicant has not disclosed that having a pair of arms and a groove region provides an advantage, solves any stated problem, or is used for any particular purpose. One of ordinary skill in the art, furthermore, would have expected that the device would perform equally well with either designs because the ability of flossing is not affected by the claimed feature. Therefore, it would have been an obvious matter of design choice to modify the device to obtain the invention as specified in claim 3.

6. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diffendal (5,906,213) in view of Dougan et al. Diffendal discloses a dental cleaning device (fig. 1) having a means for dispensing pressurized fluid out of an aperture 69, and a flossing head assembly that includes a pair of arms extending in an arc from a center region creating a cavity therebetween (fig. 1) and a piece of flossing material 5 that is supported by the pair of arms over said cavity and substantially perpendicularly over the centrally positioned outlet aperture 69 such that expelled pressurized liquid flows over said piece of flossing material in a direction substantially perpendicular to the flossing material (best seen in fig. 1, expelled pressurized liquid flows over said piece of flossing material in a direction substantially perpendicular to the width of the flossing material); except for a grooved region sized to removably support the center region. However, Dougan et al. discloses a flossing head assembly (fig. 1) comprising: a center region 23 (fig. 3a) having a pair of arms 21 (fig. 3a) extending therefrom to create a cavity region between said pair of arms, the pair of arms 21 supporting a piece of flossing material 5 over said cavity; and a grooved region 10 sized to removably support the center region 23 (fig. 3a). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the flossing head assembly so that it would include a pair of arms and a groove region as taught by Dougan, for the purpose of allowing the flossing head to be removed easily and thus replaceable with new one, and because applicant has not disclosed that having a pair of arms and a groove region provides an advantage, solves any stated problem, or is used for any particular purpose. One of ordinary skill in the art, furthermore, would have

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expected that the device would perform equally well with either designs because the ability of flossing is not affected by the claimed feature. Therefore, it would have been an obvious matter of design choice to modify the device to obtain the invention as specified in claims 4 and 6.

### ***Response to Arguments***

7. Applicant's arguments filed on 2/22/07 have been considered but are moot in view of the new ground(s) of rejection as discussed above.

### ***Conclusion***

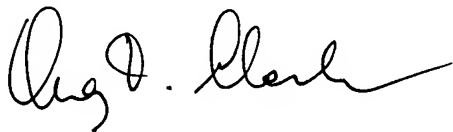
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang D. Thanh whose telephone number is (571) 272-4982. The examiner can normally be reached on Monday-Thursday & alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The Central FAX phone number for the organization where this application or proceeding is assigned is (571) 273-8300 for all communications.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Quang D. Thanh', with a stylized flourish at the end.

Quang D. Thanh  
Primary Patent Examiner  
Art Unit 3771  
(571) 272-4982